REMARKS

INTRODUCTION

In accordance with the foregoing, no claims have been amended. Claims 1, 4-7, 9, 10 and 14-17 are pending in the application.

CLAIM REJECTIONS

Claims 1, 4, 5, 7, 9, 10, 14, 15 and 17 were rejected under 35 USC 102(b) as being anticipated by Masayuki (JP 10-162464) (hereinafter "Masayuki").

Claims 6 and 16 were rejected under 35 USC 103(a) as being unpatentable over Masayuki in view of Bronsvatch et al. (US 5,528,434) (hereinafter "Bronsvatch").

Masayuki discusses a magnetic disk device to surely hold magnetic disks by using a common disk retainer even when the number of mounting magnetic disks is changed. In Masayuki, a hub 38 of a spindle motor 18 is mounted with plural magnetic disks 16a and 16b in the layer state. The disk retainer 50 in a discoid shape is screw-fitted on the upper end of the hub by fixing screws 52. The disk retainer is formed with a 1st holes for obtaining clamp force, required for mounting two magnetic disks and a 2nd holes for obtaining clamp force required for mounting three magnetic disks. The 2nd holes are provided in positions separated from the 1st holes as against the center of the disk retainer respectively. The disk retainer is fixed to the hub by screwing it with fixing screws through the 1st or 2nd holes in accordance with the number of mounting magnetic disks. Masayuki, English Abstract.

Bronshvatch discloses a disc clamp with an integrated stiffener for hard disc drives. The disc clamp 46 includes a central mounting portion that extends from the center of the disc clamp to a first radius 56. This central mounting portion 54 also includes a plurality of screw holes 58 equally spaced about a circle having a second radius 60 that is less than the first radius 56. The central mounting portion 54 also has a central opening 62. The central mounting portion 54 of the disc clamp 46 is bent downward from the center forming an obtuse conical shape. This conical central mounting portion will be deformed to a flat configuration upon assembly. The disc clamp 46 also includes a stiffening bend 64 immediately outside and defining the extent of the central mounting portion 54. This stiffening bend 64 is actually a compound bend made up of a first bend 66 in the upward direction and a second bend 68 in the downward direction. The

configuration of the two simple bends 66, 68 that make up the stiffening bend 64 are selected, along with the material thickness, such that the stiffening bend 64 forms a portion of the disc clamp 46 that is effectively non-bendable under the intended clamping force. Bronshvatch, 5:34 – 5:59.

Claims 1 and 4-7

Claim 1 recites: "...a plurality of screw coupling holes into which screws are inserted to be coupled to an upper end portion of the spindle motor and provided at a predetermined distance in a circumferential direction inside the stress distribution portion..." In contrast to claim 1, Masayuki discusses 1st and 2nd [screw] holes at differing radii R0 and R1. In Masayuki, when the disk retainer 50 is coupled to the hub 38 of the spindle motor 18, uneven stresses due to the clamping force by the screws 52 is applied to the pressing portion 50a of the disk retainer 50 and the disk 16a. As such, because the screws are unevenly placed around two separate radii, the stress concentrates on the screwed portions designated by 54 and 56 of Figure 3 of Masayuki, and the uneven stress is directly transferred to the disk 16a. Thus, the stress applied to the disk 16a is not uniformly distributed in the circumferential direction. As a result, waviness is generated in the disk 16a so that the flatness of the disk 16a is impaired.

The technical feature recited in claim 1 of providing screw coupling holes at a predetermined distance in a circumferential direction inside the stress distribution portion prevents this problem.

Claims 4-7 are dependent on claim 1 and are therefore believed to be allowable for the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 9, 10 and 14-17

Claim 9 recites: "...an inner portion having a plurality of apertures circumferentially arranged at predetermined distances inside the substantially wave-shaped edge portion..." In contrast to claim 9, Masayuki discusses 1st and 2nd [screw] holes at differing radii R0 and R1. In Masayuki, when the disk retainer 50 is coupled to the hub 38 of the spindle motor 18, uneven stresses due to the clamping force by the screws 52 is applied to the pressing portion 50a of the disk retainer 50 and the disk 16a. As such, because the screws are unevenly placed around two separate radii, the stress concentrates on the screwed portions designated by 54 and 56 of

Figure 3 of Masayuki, and the uneven stress is directly transferred to the disk 16a. Thus, the stress applied to the disk 16a is not uniformly distributed in the circumferential direction. As a result, waviness is generated in the disk 16a so that the flatness of the disk 16a is impaired.

The technical feature recited in claim 9 of having apertures circumferentially arranged at a predetermined distance in a circumferential direction inside the stress distribution portion prevents this problem.

Claims 10 and 14-17 are dependent on claim 9 and are therefore believed to be allowable for the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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